

REMARKS

Claims 1-6, 9, 12, 14 and 24-30 are rejected as being unpatentable over U.S. Pub. No. 2002/0023587 to Burgard (hereinafter, "*Burgard*") in view of U.S. Pat. No. 5,816,163 to Achelpohl et al. (hereinafter, "*Achepohl*"). Claim 7 is rejected as being unpatentable over *Burgard* in view of *Achelpohl* and further in view of U.S. Pat. No. 6,558,554 to Jones et al. Claims 8 and 13 are rejected as being unpatentable over *Burgard* in view of *Achelpohl* et al. and further in view of U.S. Pat. No. 5,181,467 to Takekoshi. Claims 15-19 are rejected as being unpatentable over *Achelpohl* in view of *Burgard* and U.S. Pat. No. 5,330,576 to Clauditz (hereinafter, "*Clauditz*"). Claims 31 to 37 are new. In keeping with the foregoing amendment and the following argument, reconsideration is respectfully requested.

No cited reference, either alone or in combination, teaches or suggests "calculat[ing] whether a volume of the used flush tank is available to accept the resulting volume of used clean rinse" as claimed in claim 1. Instead, *Burgard* discloses a "[r]ecirculation [w]ash phase in which "recycled wash up material" is "returned to the recirculation container" such that, at "the end of the wash process, the chamber is automatically unloaded." (Paragraph 0046 and 0050). *Achepohl* discloses "[u]pon completion of the intensive rinsing process, the solvent is pumped out of the cycle into the contaminant tank via the pumps..." (col. 4, lines 63-65). Also, *Clauditz* discloses "draw[ing] liquid thinner from the flush vessel" across the fluid conduit and "[w]hen the quantity of thinner remaining in the flush vessel falls below a certain value..., thinner is then pumped... into the flush vessel" (col. 13, lines 13-55). While *Clauditz* also discloses a "sensor" that detects the level of the "flush vessel" (col. 13, lines 42-43), it does not disclose "calculat[ing]" a volume related in any way to an amount of used clean rinse as claimed in claim 1.

Neither "[a]utomatically unload[ing]" nor "pump[ing] out of the cycle into the contaminant tank" nor "draw[ing] liquid thinner... [w]hen the quantity of thinner remaining in the flush vessel falls below a certain value" as disclosed by *Burgard*, *Achepohl*, and *Clauditz*, respectively, is the same as "calculat[ing] whether a volume of the used flush source is available to accept the resulting volume of used clean rinse" as claimed in claim 1. Therefore, none of *Burgard*, *Achepohl*, and *Clauditz*, either alone or in combination, discloses the above-stated limitation of claim 1. Accordingly, claim 1 is in allowable form.

With respect to claim 24, no cited reference either alone or in combination discloses “calculating whether the amount of the second solution is greater than or less than an empty volume of the used solution tank” and “displacing an amount of the first solution from the used solution tank and removing the second solution from the fluid circuit to the used solution tank if the amount of the second solution is greater than the empty volume of the used solution tank.” Rather, as previously described, “pump[ing] out” as disclosed by *Burgard*, “automatically unload[ing]” as disclosed by *Achephol*, and pumping fresh cleaning solution into the flush vessel only when the “flush vessel falls below a certain value” as disclosed by *Clauditz* is not the same as “calculating” an “amount of the second solution” relative to an “empty volume of the used solution tank” and “displacing... if the amount of the second solution is greater than the empty volume of the used solution tank” as claimed. Therefore, none of *Burgard*, *Achephol*, and *Clauditz*, either alone or in combination, discloses the above-stated limitation from claim 24, and therefore, claim 24 is in allowable form.

With respect to claim 15, the combination does not disclose or suggest “calculat[ing] an unfilled volume of a used flush tank [and] displac[ing] a volume of used flush from the used flush tank when the unfilled volume of the used flush tank is less than the amount of clean rinse drawn through the fluid circuit...” As previously discussed in relation to claims 1 and 24, none of “[a]utomatically unload[ing],” “pump[ing] out of the cycle into the contaminant tank,” and “draw[ing] liquid thinner... [w]hen the quantity of thinner remaining in the flush vessel falls below a certain value” as disclosed by *Burgard*, *Achephol*, and *Clauditz*, respectively, is the same as “calculat[ing] an unfilled volume” and “displac[ing] a volume of used flush” related to the amount of clean solution pumped into the fluid circuit as claimed in claim 15. Therefore, neither *Achelpohl*, *Burgard*, nor *Clauditz*, either alone or in combination can render claim 15 obvious.

In sum, none of *Burgard*, *Achepohl*, or *Clauditz*, or any other cited reference, either alone or in any combination, teaches or suggests the limitations of claims 1, 15, and 24. Accordingly, there cannot be a proper *prima facie* case of obviousness. Therefore, the rejections must be withdrawn and claims 1, 15, and 24 are in allowable form.

All dependent claims, including new claims 31-37, depend from allowable claims. Therefore, all dependent claims are allowable.

In view of the foregoing, the above-identified application is in condition for allowance. In the event there is any remaining issue that the Examiner believes can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned attorney at (312) 474-6612.

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Respectfully submitted,

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